

The present invention has been described with respect to the preferred embodiments, but is not limited thereto. The teachings of all references cited herein are incorporated herein by reference.

## CLAIMS

What is claimed is:

1. An eye shade apparatus having a variable transmission comprising:  
  
an electro-optic lens;  
  
a variable power source for controlling the transmission of said electro-optic lens to have a nonuniform light transmission.
2. An eye shade apparatus according to claim 1 wherein said electro-optic lens comprises a liquid crystal material.
3. An eye shade apparatus according to claim 1 wherein said electro-optic lens comprises electro-optically active crystals.
4. An eye shade apparatus according to claim 1 wherein said variable power source comprises a manual control to vary said power source.
5. An eye shade device according to claim 1 wherein said variable power source comprises a photosensitive control to vary said power source in response to the intensity of light incident on said eye shade device.
6. An eye shade apparatus according to claim 1 comprising a manual mode of operation wherein said variable voltage source comprises a manual control to vary said power source and an automatic mode of operation wherein said power source comprises a photosensitive control to vary said power source in response to the intensity of light incident on said eye shade device and a switch permitting selection of said manual mode of operation or said automatic mode of operation.
7. An eye shade apparatus according to claim 1 wherein said electro-optic lens comprises one region, the transmission of which is controlled by said variable power source.
8. An eye shade apparatus according to claim 1 wherein said electro-optic lens comprises a plurality of regions, said variable power source comprises a plurality of power outputs, each of said plurality of power outputs corresponds to at least one of said plurality or regions.
9. An eye shade device according to claim 8 wherein the power applied to each of said plurality of regions can be the same or different.

10. An eye shade device according to claim 8 wherein said variable power source comprises a manual control to vary the power at each of said plurality of power outputs.
11. An eye shade device according to claim 8 wherein said variable power source comprises a photosensitive control to vary said power source in response to the intensity of light incident on said eye shade apparatus.
12. An eye shade apparatus according to claim 8 comprising a manual mode of operation wherein said variable power source comprises a manual control to vary said power source and an automatic mode of operation wherein said variable power source comprises a photosensitive control to vary said power source in response to the intensity of light incident on said eye shade apparatus and a switch permitting selection of said manual mode of operation or said automatic mode of operation.
13. An eye shade apparatus according to claim 8 further comprising an electronic storage medium storing a plurality of power patterns for applying to said plurality of power outputs and a switch for selecting said plurality of power patterns.
14. An eye shade apparatus according to claim 1 wherein said electro-optic lens has variable color.
15. An eye shade apparatus according to claim 1 wherein said apparatus comprises a first and a second lens adapted for shading a first and second eye or a user and a first and second side lens.
16. An eye shade apparatus according to claim 11 wherein said apparatus has a plurality of said photosensitive regions.
17. An eye shade apparatus according to claim 16 wherein said plurality of said photosensitive regions provide said nonuniform light transmission.
18. An eye shade apparatus according to 1 wherein said apparatus comprises four electro-optic lenses which comprises two side lenses and two forward lenses, and four photosensitive regions, one for each of said four electro-optic lenses.
19. An eye shade apparatus according to claim 17 further including a processor to determine said nonuniform light transmission from responses of said photosensitive regions.
20. An eye shade apparatus having a variable electromagnetic radiation transmission comprising:  
an electro-optic lens;  
a plurality of light sensitive regions; and

said  
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